

**Reynolds, P., A. Casey and L. Goldman (1990). Sacramento hepatoblastoma cluster investigation, interim status report. Emeryville, California Department of Health Services, Environmental Epidemiology and Toxicology Branch.**

## BACKGROUND

November 17, 1989 the Sacramento press called the Department of health Services (DHS) regarding an apparent cluster of “four or five” cases of hepatoblastoma among Sacramento area children. Hepatoblastoma is a rare cancer of the liver, occurring primarily in very young children, and comprising less than 1% of all childhood malignancies. The rate of hepatoblastoma in the general population is roughly one per million children (under age 15) per year.<sup>1</sup>

The Cancer Surveillance Section (CSS) obtained abstracts from the Sacramento regional cancer registry for five cases of hepatoblastoma diagnosed during the years 1987 through 1989 (to date). One of these occurred in a child from outside the Sacramento region, and the remaining four in children residing in Sacramento county at the time of diagnosis. One of these resident cases was diagnosed in 1987, and the remaining three in 1988. The estimated 1988 population of children (under the age of 15) residing in the area covered by the Sacramento regional registry is slightly over a half a million, and roughly 200,000 in Sacramento County alone. The expected incidence of this disease would be roughly one case every two years in the region, or one case every five years in Sacramento County.

The Environmental Epidemiology and Toxicology Section (EETS) also requested basic statewide incidence information from CSS for hepatoblastoma as well as for hepatocellular carcinoma in children. Complete annual incidence data are not yet available from the statewide regional registry programs, but preliminary information is summarized below (II).

EETS reviewed the epidemiologic literature and found that hepatoblastoma had definitely been associated with certain congenital anomalies (Beckwith-Wiedemann Syndrome and hemihyperthrophy) and possibly associated with certain parental occupational exposures: viral hepatitis was not associated with hepatoblastoma. A nurse-epidemiologist interviewed the identified case families. All four Sacramento case families were interviewed in-person, and the out-of-area family was interviewed by phone. The results of the five interviews are summarized below (III).